



# Community leaders tour the Lab



JACQUELINE MCBRIDE/NEWSLINE

Director Michael Anastasio addresses a group of more than 170 community guests during a presentation Thursday that was part of the Laboratory's Special Community Leader Day.

By Anne M. Stark  
NEWSLINE STAFF WRITER

More than 170 community guests oohed and ahhed Thursday as they were whisked on tours through the National Ignition Facility and the Decontamination Waste Treatment Facility as part of the Laboratory's Special Community

Leader Day. Director Michael Anastasio welcomed guests, introduced the senior management team and ran through a year in review from his appointment last July as the Laboratory's ninth director.

See **COMMUNITY DAY**, page 7

# East Avenue corridor controlled access ushers in new era at the laboratories

Controlled access to the mile-long East Avenue corridor between Sandia and the Laboratory went into effect this morning, providing an additional measure of security for the two labs. Access to the area, designated as the East Avenue Corridor Property Protection Area in concurrence with the National Nuclear Security Administration, is now limited to those with an official Sandia, LLNL, contractor, Department of Energy or NNSA badge, or those on an authorized access list. Quick pick-up of access permits are available at any of the vehicular lanes (kiosks) by those with pre-scheduled appointments with lab staff.

David Leary, director of LLNL Safeguards and Security, and Patricia Smith, director of Operations for Sandia/California, briefed the media Thursday afternoon about the security project at the "super kiosk," located at the East Avenue Corridor entrance point near the corner of East Avenue and Vasco Road.

Leary said that access control of East Avenue had been discussed among the labs for two decades but became an urgent priority in the wake of the events of Sept. 11.

"After Sept. 11, as people became very concerned about security, we thought about what could be done with a truck," Leary said, explaining that "good security for the laboratories is good security for the community."

Camille Yuan-Soo-Hoo, DOE/NNSA Livermore site office manager, added: "The DOE and NNSA are very pleased to have funded this project. It is a further strengthening of our security."

Sandia and LLNL jointly developed the East Avenue access control project. The primary objectives of the plan are to enhance safety, provide protection to

Site construction update  
— Page 5

See **EAST AVE.**, page 8

# CAMS research leads to better understanding of Hiroshima radiation dose calculations

By Bob Hirschfeld  
NEWSLINE STAFF WRITER

New Laboratory research into radiation absorbed by survivors of the Japanese atomic bombs has reaffirmed the accuracy of earlier studies. At issue was a scientific reevaluation of calculated neutron doses, undertaken in the so-called Dosimetry System of 1986, or DS86. It suggested that survivors had actually absorbed much higher

See **RESEARCH**, page 8

# An insider's view of the Human Genome Project

By Charles Osolin  
NEWSLINE STAFF WRITER

The U.S. Department of Energy's point man in the historic effort to decode the human genome candidly traced the "ups and downs" of the Human Genome Project at a Director's Invited Lecture at the Lab Tuesday afternoon. Vamping on the lyrics of Bob Dylan's "Desolation Row," Ari Patrinos, director of DOE's Office of Biological and Environmental Research, gave a poetic and sometimes trenchant insider's



JACQUELINE MCBRIDE/NEWSLINE

Ari Patrinos spoke about the Human Genome Project at a recent lecture.

account of the race between the public and private sectors to complete the first draft sequence of human DNA. Among Patrinos' tales from "Human Genome Row" was the dispute that arose in 1998 when DOE proposed a collaboration between the Joint Genome Institute (JGI) and Celera Genomics, the government project's private-sector rival headed by genomics pioneer Craig Venter. Along with Elbert Branscomb, the first director of the JGI —

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Patriotism  
is boss  
— Page 3



Lump sum  
merits comment  
— Page 3



Setting a  
career course  
— Insert



## LAB COMMUNITY NEWS

### Weekly Calendar

Friday  
**1**

**Parking lot B-7** will be closed today until Sunday, Aug. 3, for repairs, resealing and re-stripping. Parking will be available in lots B-7 north, B-7 west and A-8. If you have any questions, call Mike Ramsey, 2-9252. For further information on construction projects at the Lab, see page 5.

Tuesday  
**5**

**Fidelity Retirement Counselors** will be available today and Wednesday and Aug. 19 – 20 to assist employees with assessing the current state of their retirement accounts. To set up a consultation, call 800-642-7131.

Friday  
**8**

**The Institute for Scientific Computing Research** presents “Automatic Comparative Profiling of Parallel Cluster Applications,” by Karen Karavanic, Portland State University. 10 a.m., Bldg. 451, room 1025 (property protection area). Contacts: John May (CASC), 3-8102, or Leslie Bills, 3-8927.

The deadline to submit project proposals to STEP is today for LLNL researchers interested in applying for **NNSA funding** in FY04. With NNSA-DP Office of University Partnerships direct funds, STEP administers internships for LLNL college student employees entering careers important to NNSA’s critical skills work force. A description of current FY03 internship projects is available on the Web (<http://internships.llnl.gov>). Last year’s FY03 proposal (<http://step.llnl.gov/proposals/fy03/>) package submission to NNSA is also available. For a copy of the template and additional information or help in proposal development, contact Barry Goldman, goldman1@llnl.gov, 2-5177 or Don Correll, correll1@llnl.gov, 2-6784.

UP  
&  
COMING

The **University Relations Program** is hosting a set of focus groups with UC Davis on Aug. 28, to enhance strategic collaborations between the two institutions. Groups involved include: Agriculture, Bioscience & Health Services, Physical Science, Engineering, Computer Science, Geoscience, and Atmospheric and Environmental Science. To participate, contact Harry Radousky, 2-4478.

LLESA has discount field level tickets to the Aug. 30, **Oakland A's vs. Tampa Bay Devil Rays baseball game**. Game time is 6:05 p.m. and there will be a post-game fireworks show. LLESA price: \$14 each (gate price \$24). The LLESA office is located in Bldg. 415, room 142 and is open Monday – Friday, 10 a.m. until 4:30 p.m.

## Back to the future for Lab retirees

**Alice Schwarber**

(Travel, 1975) was a travel agent until 1995. She and her husband, Anthony (Mechanical Engineering) have been doing some traveling. They circumnavigated South America with a passage through the Straits of Magellan, went to the Galapagos Islands and spent 102 days on an American President Line freighter in the Orient. In June, Alice went to Iceland and found perfect weather, blue skies, temperatures in the 60s, and 250,000 very gracious, blond/light brown-haired, blue-eyed people. She understands they will do DNA testing to see if they are all related, as they look alike. The scenery is very different from the United States: all green except the mountaintops where some of the glacier snow dates from the Ice Age. If you don’t like lamb or fish, stay home, a.schwarber@att.net.

**Jim** (Physics/Applied Technology, 2002) and **Louise Morris** (Computations, 2002) find their first year in retirement was far more than they expected. Immediately following retirement, they took a five-week VW van camping trip, visiting friends and relatives enroute to the Icefield Parkway in the Canadian Rockies.

In the fall, Louise took the Livermore History class and also volunteered as a math coach for the MathCounts program. It was great fun and most rewarding. Then they both took classes for the Volunteer Income Tax Assistance/Tax Counseling for the Elderly (VITA/TCE). After passing qualification tests, they assisted their first clients at the Livermore Civic Library. This way taxes can be interesting, especially when they are someone else’s.

They have both been involved with the

Masons and Eastern Star fraternal organizations, which greatly increased with Jim’s election as chairman of the Adult Advisory

Board of the Livermore Rainbow Girls. Volunteering for a variety of Masonic supported activities such as Fitness Day, May Nissen Pool Snack Shack, Rainbow Summer Camp and local triathlons keeps them thinking young, all the more important once retired. And yes, they still square dance and took a short cruise to Mexico last fall. They plan to travel more, just as soon as they find the time.

Eighty-two people attended the July retiree luncheon to hear **Jay Davis** speak on “The Future of Science and Technology.” The August luncheon will be Wednesday, Aug. 20, with Livermore Police Chief Steve Krull speaking on his selection process, why he chose Livermore and the interface between the police department and LLNL.

Be sure to visit the **Retiree Organization Web** page: [www.llnlretirees.org](http://www.llnlretirees.org). There are a lot of new features: an “Opportunities” listing for special volunteer activities that get sent to the Retirees Organization; it is now possible to place classified ads in *Newsline* using the on-line form; a special form is available to list people for access down East Avenue once the new security restrictions are implemented; and new pictures of recent activities (the 2003 picnic) and announcements of luncheon speakers, dinner-dances and blood drives. Check it out frequently.

Please send any news or input to **Jane or Gus Olson** at AugustO@aol.com or JaneRubert@aol.com, phone (925) 443-4349 or mail to 493 Joyce Street, Livermore, Calif. 94550

## IN MEMORIAM

### Milt Eaton

Longtime employee Milt Eaton died Tuesday at his home in Escalon. He was 63.

His career at the Lab began in 1976. Prior to his retirement in October 2002 and continuing part time since then, Eaton worked in Procurement & Materiel for NIF Programs and the Physics and Advanced Technologies Directorate, providing specialized business support in the areas of procurement planning, subcontracts and business management. His colleagues recall his special ability to efficiently handle the red tape with a smile.

He had recently purchased a farm, and according to his family, delighted in planting additional trees and riding his tractor while working his nut and fruit orchards.

He is survived by his wife Betsy, a son and daughter, David and Becky, and his 92-year-old mother, Julia.

His funeral is planned for Monday at 10 a.m. at Calvary Reformed Church in Ripon.

In lieu of flowers, the family has requested donations be sent to San Joaquin Valley Teen Challenge, P.O. Box 611, Turlock, Calif. 95381-0611.

## Newsline

*Newsline* is published weekly by the Internal Communications Department, Public Affairs Office, Lawrence Livermore National Laboratory (LLNL), for Laboratory employees and retirees.

### Contacts:

Media & Communications manager: Lynda Seaver, 3-3103

Newsline editor: Don Johnston, 3-4902

Contributing writers: Bob Hirschfeld, 2-2379; David Schwoegler, 2-6900; Anne M. Stark, 2-9799; Stephen Wampler, 3-3107; Gordon Yano, 3-3117, Leslie Schwartz. For an extended list of Lab beats and contacts, see <http://www.llnl.gov/llnl/06news/NewsMedia/contact.html>

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Telephone: (925) 422-4599; Fax: (925) 422-9291

e-mail: [newsline@llnl.gov](mailto:newsline@llnl.gov) or [newsonline@llnl.gov](mailto:newsonline@llnl.gov)

Web site: <http://www.llnl.gov/PAO/>

## Buckle Up



*Educating the Lab population on the importance of using a safety belt — whether it's driving a personal car or a government vehicle.*



AROUND THE LAB



Lab seeks comments on lump sum merit program

The Laboratory has requested authorization from DOE to implement a lump sum merit program effective FY2004.

The lump sum merit will augment the regular Compensation Increase Plan (CIP) request covering base salary adjustments.

The use of lump sum merit will be an important element of the Laboratory’s new Integrated Performance and Pay Program (IPPP) which was introduced in April 2003.



- **How do the lump sum merits fit into the Laboratory’s salary management philosophy?**  
The Laboratory’s salary management philosophy is to recognize and reward total contribution as assessed by ranking. Based on ranking results, salary management decisions are based on an employee’s pay relative to a target salary. The lump sum merit program will allow the Laboratory to reward strong performers who are at or above their base salary target.
- **Will the Lab’s Compensation Increase Plan (CIP) request be reduced to accommodate the lump sum merit program request?**  
No. The lump sum program request is in addition to the normal annual CIP (base salary increase) request.
- **Has this program already been approved by DOE?**  
No. The Laboratory has requested authorization to implement the program effective Oct. 1. A response from DOE is anticipated in early August.
- **If I receive a lump sum merit, will it count as income toward my pension calculation?**  
No. The lump sum merit is a discretionary, one-time, non-base building payment in recognition of your

The intent is to have the ability to recognize strong performers who are at or above their base salary target by granting a lump sum merit. This has the potential of allowing the Laboratory to reward and recognize strong performers without impacting base salary alignment; allocate our base salary authorization to strong performers who are below target; and maintain base salaries consistent with Laboratory salary management philosophy. If approved by DOE, the lump sum merit program will be effective

- total contribution over the previous year. In accordance with University of California Retirement Plan provisions, lump sum merits are not considered “covered compensation” for retirement calculation purposes.
- **How do I know what my salary target is?**  
For 200 series employees, your salary target is based on your total contribution using relative value ranking. The result of relative value ranking helps determine your salary target on the total contribution curve.  
For 050, 100, 300, 400 and 500 series employees, your salary target is determined based on your ranking and placement in the salary range. Your directorate will determine specific targets. General institutional guidance will be issued concurrent with the initiation of the salary program in August.
  - **How much of a lump sum could I receive?**  
The use of a lump sum merit is discretionary. Specific guidelines have not yet been determined. However, if your current salary is at or above FY04 salary targets, the amount of lump sum merit you may receive may vary based on your total contribution and how far above target your salary is. General institutional guidance will be issued concurrent with the initiation of the salary program in August.

Oct. 1.

Additional information about the lump sum merit program is available on the Web at [www-r.llnl.gov/IPPP/lump-sum.html](http://www-r.llnl.gov/IPPP/lump-sum.html). Specific guidance on the use of lump sums will be developed and communicated concurrent with the initiation of the FY2004 salary program. Employee comments or questions may be submitted to: [lumpsum-merit@llnl.gov](mailto:lumpsum-merit@llnl.gov), or by Lab mail to Lump Sum Merit at L-711. Comments must be received by Aug. 13.

- **If I am below target, could I get both a base pay increase and a lump sum merit?**  
The use of lump sum merits is discretionary. There may be situations where employees below target may receive a base salary adjustment and/or a lump sum merit payment (e.g., to address internal equity, distance from target salary, etc.). Specific guidelines will be determined once the CIP is approved.
- **If I am above target, could I get both a base pay increase and a lump sum merit?**  
Again, the use of lump sum is discretionary. The Laboratory may consider allowing minimal base salary increases for employees above target in certain situations. Specific guidelines have not yet been determined and will be based on the FY04 CIP.
- **Is the lump sum program a replacement for a reward and recognition program?**  
No. The two programs serve different purposes. The merit program (either base or lump sum) focuses on salary management based on total contribution. The Award and Recognition Program is not based on salary management. Rather the intent is to recognize one-time special achievements and contributions (individual or team) using a combination of cash and/or memorabilia.

Aid to deployed Lab reservists recognized

By Leslie Schwartz  
NEWSLINE STAFF WRITER

Virginia George, policy specialist in the Administration and Human Resources Directorate (AHRD) office, received the Employer Support of the Guard and Reserve (ESGR) “My Boss is a Patriot” award for her dedication and efforts as the point of contact to facilitate various benefits and services for Lab guard and reserve members who were deployed after Sept. 11.

“I feel privileged and honored to accept this award on behalf of the Laboratory and couldn’t be prouder of the employees who are serving,” George said.

Lieutenant Colonel Anthony Totaro, senior intelligence officer with the 129th Rescue Wing of the California Air National Guard, nominated George for this award after he witnessed firsthand the effects of her work.

“I can’t tell you how much I appreciate all the people who made this happen and all the support they and the Lab provided my family while I was deployed overseas. The nomination was a way of saying thank you,” Totaro said.

George, along with a committed team from Human Resources, Benefits, Payroll, and Safeguards and Security worked together to complete the task. “It took a village,” George added. “It’s the combination of people and effort that makes things happen,”

Currently, the Lab employs more than 100 guard and reserve men and women, including 19 that remain on full-time active duty.



JACQUELINE MCBRIDE/NEWSLINE

Virginia George, left, holds her certificate for helping organize the supplementation of pay and benefits for Lab employees who were deployed after Sept. 11. A team of supportive staff from the Payroll and Safeguards and Security departments include, front row, Valerie Horton, Janell Largent; second row, Adalia Loder, Susan Browning, Cindy Mcaneney; back row, Kelly Karstens, Lt. Colonel Anthony Totaro, rear, of Z Division, who was a deployed employee and Athena Fowler.

ESGR representatives, Venna Bishop, the San Jose region chair, and Alex Morgan presented George with a certificate of honor, thanking her for her service and support and also gave her a commemorative pin and an invitation to visit Moffett Field and see the Thunderbirds perform in October.

George’s work, along with a collaborative team effort made it possible for military employees to support themselves and their families while they are supporting the nation. “I was just doing my job,” George said. “All this recognition is like the frosting on the cake.”

Day on the Green will offer diverse cultural fare and delicacies

Cultural performances, international displays, clothing contests and lots of great food. The annual Day on the Green celebrates the diversity that makes LLNL rich in a new dimension.

Under the theme “One World, One People,” the annual Day on the Green will be held Thursday, Aug. 14, from 11:30 a.m. to 1 p.m. in the LLESA pool and picnic area.

Featuring a diversity of events, including Kung Fu presentations, samba dancing, a Spanish salsa band, and country western group, and a bomani drum and dance ensemble, Day on the Green is a unifying time where Lab employees of all origins can come together and share their cultural traditions.

Stop by to view the colorful display booths that represent many world cultures and interests or experience the culinary sensations of a wide variety of ethnic delicacies that will take your taste buds on their own international adventure.

For more information, contact Michele Cardenas, 3-2796.



## NEWS YOU CAN USE

# Summer showdown for Lab's student employees

As we near the last few weeks of summer, students are ready to show off their work. In addition to the seminars and intern events offered, poster symposiums and talent shows are other great ways to showcase the accomplishments of summer students.

Check out descriptions below or on the Web at the student bulletin board, <http://education.llnl.gov/sbb/>, where you can register to attend.

### Week of Aug. 4-8

**Monday**  
**4**

#### Physics & Advanced Technologies associate director brown bag luncheon

Come join Bill Goldstein with your lunch at noon for a question-and-answer session in the field of physics and advanced technologies, and learn about future projects, careers and educational opportunities in the field, and related topics. This event will be located in Bldg. 219, room 163. Contact: Barry Goldman, 2-5177.

#### "SPIDER: An integrated system of surveillance, prediction and optimized response to a national crisis"

What would we do if a national outbreak or epidemic occurred, such as smallpox or foot and mouth disease? Focusing on the response to the situation, this seminar aims to develop a method to reach an optimized decision through computational methods. The Nuclear Science Internship Program is sponsoring this seminar at 2 p.m. in the Bldg. 155 auditorium. Contact: Lynda Allen, 2-1748.

**Tuesday**  
**5**

#### The Nuclear Science Internship Program (NSIP) poster symposium

The Glenn T. Seaborg Institute and

its summer interns are holding the annual Nuclear Science Internship Program (NSIP) poster symposium to showcase the work of their summer student interns. Projects on display include topics such as nuclear-science emphases in medical, environmental, non-proliferation and actinide-science applications. Come by Bldg. 151, room 1209 from 2-4 p.m. Contact: Lynda Allen, 2-1748.

**Wednesday**  
**6**

#### LLNL student research poster symposium

Summer students from all arenas of science and technology will present their summer projects through a visual display of posters in the West Cafeteria from 3-4:45 p.m. The symposium seeks to promote undergraduate and graduate student research by providing a forum to experience the art of presenting technical research and aims to increase awareness of the student research achievements. Contact: Barry Goldman, 2-5177.

#### "Data Mining"

The Institute for Scientific Computing Research presents this seminar on scientific applications for data mining, specifically referring to the Sapphire project, which works to improve the way scientists extract useful information from data. Beginning at 3:30 p.m., this seminar will take place in Bldg. 451, room 1025. Contact: Linda Bodtke, 3-0421, or Chandrika Kamath, 3-3768.

**Thursday**  
**7**

#### Speaker & ice cream social

Cool off on a hot day with some ice cream and expand your knowledge of fission reactions and plutonium. Darleane Hoffman, University of California, Berkeley graduate school professor and faculty senior scientist at Lawrence Berke-

ley National Laboratory (LBNL), will speak on "natural" nuclear fission reactors and "natural" plutonium from 11 a.m. to 1 p.m. in the Bldg. 543 auditorium. Ice cream will be served outside. Contact: Lynda Allen, 2-1748.

#### "Topics in Machine Learning and Data Mining"

This talk introduces some of the basic components of evolutionary algorithms. Applications for data mining and using these algorithms will be discussed, as well as their successful implementation in science, business and industry at 3 p.m. in Bldg. 219, room 163. Contact: Linda Bodtke, 3-0421, or Erick Cantu-Paz, 4-2467.

#### College Cyber Defenders (CCD) student outbrief

The Lab's College Cyber Defenders (CCD) students will present their projects and important findings, discussing some lessons they have learned through their work. Come learn about the work of these high-tech students at 1:30 p.m. in Bldg. 219, room 163. Contact: Terry Brugger, 4-4992.

**Friday**  
**8**

#### Intern talent show

Come watch talented students perform in the first ever intern talent show at the picnic area by the pool starting at 11:30 a.m. Any student who has a talent and would like to share it with their summer peers and researchers is invited. Talents are expected to be music related and/or approved by a subcommittee of the Institutional Education Committee. Contact: Barry Goldman, 2-5177.

Summer program calendar items may be sent to Leslie Schwartz, 3-6624, L-797, [schwartz16@llnl.gov](mailto:schwartz16@llnl.gov)

## BRIEFLY

### New Web site helps ID information

Laboratory employees and managers now have a single resource for clarifying the requirements for controls on a variety of types of unclassified controlled information (UCI), formerly referred to as sensitive unclassified information (SUI).

The new UCI Website [<http://www-r.llnl.gov/securityprogram/uci/uci.html>] provides a list of controls, a means of working through the controls to see which ones apply, and details on the marking, handling, storage, transmittal and destruction of unclassified but controlled documents.

This Website captures a common approach to the identification and protection of a relevant set of UCI categories for use by both Los Alamos and Lawrence Livermore national laboratories.

This guidance creates no new policy for unclassified sensitive or controlled information. It clarifies and adjusts the requirements for the use of the term "Official Use Only" that was introduced last year by DOE, and recently modified. It brings together in one place the existing guidance on how to identify and protect material that, while unclassified, still

requires some degree of control and special handling.

For questions about UCI, contact Dave Brown at 3-3194 or [brown10@llnl.gov](mailto:brown10@llnl.gov).

### Student Research Symposium

Lab employees are invited to the Student Research Symposium, which will take place from 3 to 4:45 p.m. Wednesday in the West Cafeteria.

The symposium is modeled after poster sessions that are the mainstay of most professional scientific meetings. By having summer students present their research achievements to a broad set of Laboratory employees, the symposium creates a unique environment for celebrating and fostering appreciation of the valuable support students can provide to Laboratory research. The symposium also helps to support the students' educational research experience and the Lab's goals for a highly talented and diverse work force. Refreshments will be served.

### 'Maximizing Your Toolkit' training

The Recruiting and Employment Division has announced its technical recruiter training for the fall 2003/spring 2004 recruitment season.

The training is a series of workshops designed to provide timely and invaluable information for new and seasoned recruiters. These sessions are presented by experts in the field and offer a hands-on, interactive training experience. The training

is open to all Laboratory technical recruiters and any individual who has direct involvement with the recruitment process. Each workshop will be offered twice.

#### • Workshop I: Blueprint for Successful Recruiting: Opportunities at LLNL

Learn first hand from the directorates about "hot" projects and workforce needs. Each session will feature different speakers who will highlight their organizational staffing needs. Go to the Website, [http://www-r.llnl.gov/human\\_resources/sedd/tech\\_training/](http://www-r.llnl.gov/human_resources/sedd/tech_training/), to view the speaker line-up. Sessions will be: Aug. 19, 8:30 a.m. – noon; Aug. 28, 8:30 a.m. – noon.

#### • Workshop II: Power-Up and Polish Your Recruitment Experiences

Learn about best practices and tools for customizing your recruiting efforts and attracting top diverse candidates: Aug. 21, 1 – 4:30 p.m.; Sept. 4, 8:30 a.m. – noon.

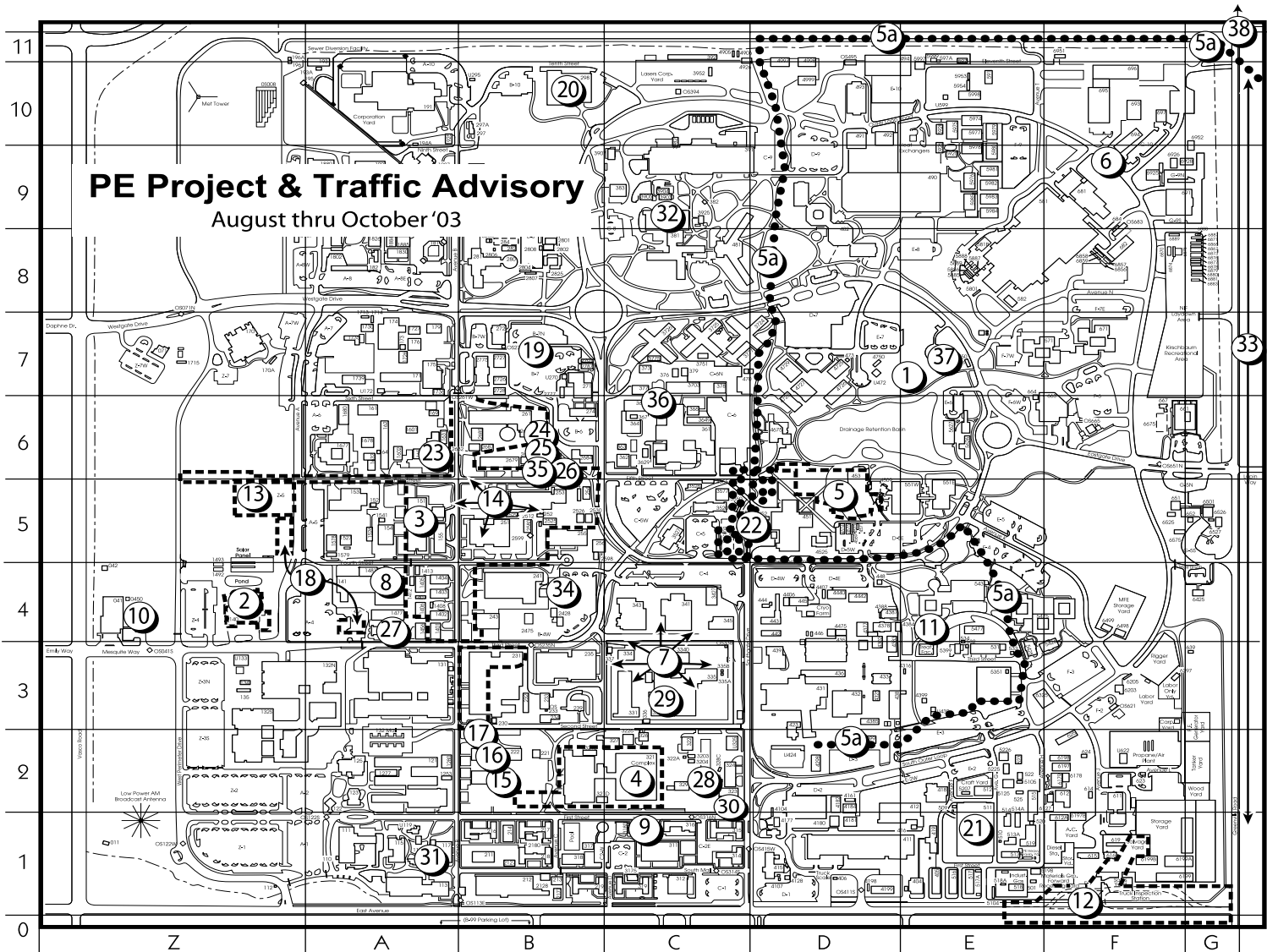
#### • Workshop III: Nuts and Bolts for Keeping it Legal and Factual

Build your knowledge base to respond to those sometimes difficult-to-answer questions about AA/EEO compliance, Lab resources, benefits, compensation and educational opportunities and avoid those legal monkey wrenches: Aug. 26, 1 – 4:30 p.m.; Sept. 10, 8:30 a.m. – noon.

All workshops are held in the Bldg. 543 auditorium. For more information, contact Angelas Ford, 2-6422, or [ford22@llnl.gov](mailto:ford22@llnl.gov).



NEWS OF NOTE



Item No.	Project	Grid Location	Contact name/ extension	Staging area	Construction start date	Estimated construction completion	Impact
1	Bldg. 471, new central cafe	D-7, E-7	Barbara Pulliam, 3-4680	E-7 parking lot, north of retention basin	Started	Oct. '03	Parking in E-7 parking lot.
2	International Security Research Facility (ISRF), Bldg. 140	Z-4	Roy Neyer, 2-8830	West of Bldg. 141, north of Mesquite Way between West Perimeter Drive and Avenue A	Started	Dec. '03	West Perimeter Drive closed to thru traffic north of Mesquite; Mesquite Way to close in '04.
3	Bldg. 151 seismic	A-5	Mike Atkinson, 2-9217	Northwest corner of Bldg. 151	Started	Oct. '03	Traffic controls required intermittently on Fourth Street between Avenue A and Avenue B.
4	ETCU Bldg. 321	B-2, C-2	Paul Kempel, 3-0565	West of Bldg. 321 and in Bldg. 321 corporation yard	Started	Sept. '04	Local traffic delays.
5	Terascale Simulation Facility (TSF), Bldg. 453	C5-6, D-5-6	Rick Visoria, 2-0939	East of Bldg. 451, north of South Inner Loop Road	Started	Sept. '06	Impacts to C-4, C-5, D-5E, D-5W, E-4 and E-5 parking lots, traffic delays on Inner Loop Road. Vehicle and foot traffic redirected at eastern end of Fifth Street and access road to Bldg. 451 corporation yard.
5a	TSF, big dig	D&E2-5;D6-11, E,F,G-11	Ian Watson, 3-2842	Various	Started	Apr. '04	Local impact varies with segment schedules - for details, call Ian Watson.
6	NIF and NIF Outer Loop Road closure	F-9	Vaughn Draggoo, 3-0185	Multiple locations	Started	TBD	No through traffic on north Outer Loop without special permit or advance approval.
7	Superblock perimeter barriers	C-3	Fred Glaski, 3-2987	Various, to be determined	Started	June '04	Various. Extended vehicle exclusion area from Superblock.
8	Bldg. 141 remodel	A-4	Cesar Javier, 2-8847	North of Bldg. 141	Started	Sept. '03	Local parking to be impacted (Bldg. 141 corporation yard).
9	Bldg. 313 - electrical change	C-1	Cesar Javier, 2-8847	Parking lot north of Bldg. 311	Started	Aug. '03	Parking lot north of B311.
10	Bldg. 041 parking lot - repave/stripe	Z-4	Gary Freeland, 2-9411	West, north, & east sides of building	Started	Sept. '03	Local impact - primarily around facility, and some to Mesquite Way.
11	Treatment Facility E - eastern landing mat	E-4	Carol Fraga, 3-3899	South of Bldg. 543	Started	Sept. '03	Local impact to traffic on 1-way street south of Bldg. 543.
12	East Avenue security enhancements, east end	E,F,G-0; F-1	Bill Huddleston, 2-8107	Sales yard, south of Bldg. 616	Started	Nov. '03	Vehicle access from East Avenue to Bldg. 615 will be closed permanently. Traffic delays during construction of truck inspection station. Impact to the salvage yard parking lot.
13	Z-5 (new) parking lot	Z-5	Gary Freeland, 2-9411	Z-5 parking lot	Started	Sept. '03	Impacts to Avenue A traffic and parking lot A-5.
14	Fifth Street rehabilitation and extension	A,B-4,5,6;Z-5,6	Dean Yoshida, 2-3670	Between West Perimeter and Avenue A	Started	Jan. '04	Reduces Limited Area; fence changes may impact facility access. Fifth Street extends both east and west.
15	Bldg. 222, center	B-2	Mo Bissani, 3-4299	East of Bldg. 222	Started	Jan. '04	Traffic impacts to First Street and Avenue B.
16	Bldg. 222, north	B-2	Mo Bissani, 3-4299	East of Bldg. 222	Started	Sept. '04	Traffic impacts to First Street and Avenue B.
17	Roof LI, Bldg. 231	B-3	Charlie Brown, 2-8570	South of Bldg. 231 and across the street (north of Bldg. 222)	Started	Nov. '03	Intermittent local traffic delays and restricted parking on Second Street.
18	Replacement building, Bldg. 142	A-4/Z-5	Danny Nguyen, 2-4883	Z-5 sector west of Trailer 1478 and Trailer 1578	Started	Feb. '04	Parking restrictions to the A-4 parking lot and intermittent traffic delay from laydown area to Bldg. 142.
19	B-7 and B-7N parking lots - repave/stripe	B-7	Jon Laurant, 3-1099	B-7 parking lot	Started	Aug. '03	Impacts to parking and circulation at specific locations during work.
20	Bldg. 298 roof	B-10	Ed Sioson, 2-0609	Parking lot B-10, west of Bldg. 298	Started	Jan. '04	Parking and access to Bldg. 298.
21	Bldg. 511 rehabilitation	E-1	Dean Yoshida, 2-3670	Around exterior of Bldg. 511	Started	Jan. '04	Parking restrictions and intermittent traffic delays.
22	Bldg. 451 re-roof	D-5	Cesar Javier, 2-8847	West side of Bldg. 451	Started	Sept. '03	Local impacts.
23	Bldg. 166 roof	A-6	Charlie Brown, 2-8570	North and South of Bldg. 166	Started	Oct. '03	Local parking to be impacted.
24	Trailer 2633 demolition	B-6	Mo Bissani, 3-4299	TBD	--	--	Pending, will be local impact only.
25	Trailer 2626 demolition	B-6	Mo Bissani, 3-4299	TBD	Started	Sept. '03	Local impact only.
26	Trailer 2629 demolition	B-5,6	Mo Bissani, 3-4299	TBD	Started	Sept. '03	Local impact only.
27	Trailer 1478 demolition	A-4	Mo Bissani, 3-4299	TBD	Started	Sept. '03	Some expected to the A-4 parking lot and locally.
28	Bldg. 328A demolition	C-2	Mo Bissani, 3-4299	TBD	Started	Sept. '03	Local impact only.
29	Bldg. 332 electrical replacement	C-3	Gary Freeland, 2-9411	Tentatively in Super Block	Started	May '04	Periodic impact to accessing Bldg. 332.
30	Cathodic protection/UTel	C-2	Jon Ulrech, 4-2816	South of B323	Started	Aug. '03	Impact to local area.
31	Cathodic protection/UTel	A-1	Jon Ulrech, 4-2816	B117 - area TBD	Aug. '03	Sept. '03	Impact to local area.
32	Bldg. 381W, hi-bay mods	C-8	Len Freitas, 2-0690	B381 corporation yard	Aug. '03	Nov. '03	Local impact around Bldg. 381.
33	Replacement of 8-ft.security fence-Greenville Road	G-0-12	Carol Fraga, 3-3899	LLNL fence on Greenville Road	Aug. '03	Sept. '03	Local impacts along Greenville Road. Possible impedance @ gates to credit union & public affairs, and Eastgate entrances while gates being replaced.
34	Replacement Bldg.-B242	B-4	Danny Nguyen, 2-4883	TBD	Oct. '03	Dec. '04	Impacts to B-4 parking lot; traffic delays on Third Street. Local impact to area.
35	Replacement Bldg.-B264	B-6	Danny Nguyen, 2-4883	TBD	Oct. '03	Dec. '04	Impacts to B-6 & B-6SW parking lots. Interim delays on Inner Loop Road and Fifth Street; also local impacts.
36	Biosafety Level-3, Bldg. 368	C-6	Dean Yoshida, 2-3670	Bldg. 368 area	Oct. '03	Feb. '04	Local impact to area.
37	Exterior recreational ball courts	E-7	Ed Sioson, 2-0609	North of retention basin, east of new Central Cafeteria	---	---	ON HOLD (Impact to pedestrians, Inner Loop Road.)
38	City of Livermore - Greenville Road railroad crossing	G-11	Tom Schmiegell, 2-0135	---	Spring '04	7 months	Greenville Road detours required for 4 months; additional 3-month traffic controls and traffic delays.

Note: Project information is subject to change and is based on the best information available at the time of publication for projects within the Aug. thru Oct. timeframe. Go to the website for the most current information ([http://www-r.llnl.gov/plant\\_eng/siteplan/siteoff.html](http://www-r.llnl.gov/plant_eng/siteplan/siteoff.html) to "Project Map" from the pulldown menu).  
SSP-03-0003-04rev2-CHU



# CLASSIFIED ADS

See complete classified ad listings at  
<https://www.ais.llnl.gov/newsline/ads/>

AUTOMOBILES

1994 - Miata MX-5,conv,4-cyl(5-sp/4-man) A/C, stereo/cassette, 130K, orig owner, good condition, \$4,000. 925-831-3595

1995 - Ford Probe SE, Sport Package, 63k miles, garaged/immac. Great college car. Must Sell. \$4500/obo. 925-240-1090

1996 - Isuzu Trooper SE, loaded, 4WD,V6,ps,pw,pl,mr,ac,CD,leather,73K miles, \$10,500 OBO. 925-314-9478

1995 - - Honda Civic. 184K commute miles, 5 speed manual trans., needs some body work, very reliable, runs great. \$2900/OBO cell: 209-480-0068

1992 - Acura Legend LS, original owner, super clean, new tires, 134k miles, \$5900. 925-443-1278

1993 - Volvo 850, 4d 5 cyl. automatic. Very good condition. 45,400 miles \$7,000.00 925-447-4617

1980 - Mazda GLC Hatchback. Great Little Car. Very Reliable. Doubt it will pass new smog rules. \$500 Firm 925-443-4413

1988 - IZUSU TROOPER 4x4, good condition, manual trans, 4 cyl, AC, roof rack, tinted windows \$1,100 obo 209-836-1665

2001 - Subaru Outback AWD wagon in very good condition. White exterior, leather interior, automatic transmission, CD player, 28,500 miles. \$17,000. 925-371-1607

1997 - Gmc Jimmy 2WD SLS 65k miles pl, pw, ac, at,transferable extended warranty \$7,500 209-239-6526

1999 - Full Size Van, Dodge Ram, Under warrantee, seats 12, AC and much more. 48000 miles. \$11000. 925-516-0856

1993 - Honda Civic EX 2D Coupe, 5 spd manual, pwr windows/door, A/C, AM/FM/CD, Sun Roof, approx. 160k miles. Asking \$3100. call evenings/wkends 925-736-9452

1995 - GMC SAFARI AWD,SLT Package, Great ski vehicle, 8Pass, Loaded, all options, 130K miles,Must Sell! \$5999 / Best Offer 209-599-4644

1989 - Honda Accord. 5speed,4dr. 187,325 miles. new alternator, very reliable. \$2200 925-443-0369

1955 - Classic 1955 Chevy 4 door. No time to restore. \$3,000 925-634-6353

AUTOMOBILE ACCESSORIES

Weld Racing Super Single II wheels. New in boxes. Qty.4, Size 17x10, 6x5.5 bolt pattern. weldracing.com/SSII.html \$1000 209-329-7218

BICYCLES

Trek 1100. 19.5cm. A few years old, but like new, rarley ridden. 550.00 new, sell for 200.00 or BO 209-832-5944

2002 20inch Powerlite Expert BMX bike. Excellent condition.Raced only 3 times.Clipless pedals. Ready to race.Paid \$375.Sell \$300 obo. 209-824-1682

BOATS

1994 Tige ski boat, 350 hours, 2002 tandem trailer, barefoot boom, skis, wet/drysuits, lifejackets. \$20K takes all. 209-830-9129

Is that your Sears fishing boat in the LLNL for sale lot? I would like to buy it but there is no phone number. Call me. 925-455-4392

SACRIFICE 99 Skeeter SX186, 130 Yamaha, low hours, 2 Lowrance fish finders, ZX55 MotorGuide, very

clean. Teal grn. Asking \$11,750. 209-840-0166

ELECTRONIC EQUIPMENT

17in Monitor. Viewsonic EA771 1280x1024 w/ built-in speakers & mic. \$80 707-494-6689

CALCOMP pen plotter with stand and pens. Can do e-size plots. Taking up to much room. Any reasonable offer! 925-449-5640

Laptop w/ lifetime free service! 900 MHz celeron, 14.1 in. TFT LCD, 256 MB ram, 10 GB hd, Windows and Office XP. Loaded! \$1000 obo. 209-832-9534

Tape Deck- Nakamichi Model CR-1A, works great- \$40.00 925-371-5576

Antenna rotator, Ham-M, very heavy duty, old but works fine. \$25. 925-455-5655

PC game:Everquest Trilogy. (Ruins of Kunark, Everquest Classic, Scars of Velious) 30 day free play card. Brand new, never loaded or played. \$35 925-706-2337

PC: Athlon XP 1800+, 512mb ram, 80gb hd, dvd-rom, Geforce3 video, keyboard, mouse, 17 inch trinitron monitor, \$525 925-479-0787

Antique RCA Vacuum Tube B/W TV circa 1950s working in wooden cabinet. \$50 or best offer. 925-449-2008

GIVEAWAY

Mirror closet door, for 5ft. wide X 8ft high antique gold trim by Stanley. You pick-up. Call after 6 p.m. 925-426-0648

HOUSEHOLD

Two twin box-spring mattresses (together make a king) + king metal frame. Excel cond. \$100. 925-855-0607

COUCH plus RECLINER: Both off-white; exc.cond.; leather recliner; full size couch; \$150 each; pictures available 925-736-7350

Contemporary oak poster bed (queen size) with matching dresser and chest of drawers \$700.00 also two dinning tables & chairs. Milpitas 408-263-8822

Washer- Kenmore, very good condition. White \$85.00 925-443-5565

Kitchen/Dinette set. 48-inch round formica (walnut) table, 4 matching swivel chairs. Very good condition. \$100. 925-447-0596

Matching couch and love seat. Good condition. \$350. Please call after 6:00 PM. 209-834-0469

Captains Bed/trundle, solid oak, beautiful. Large drawer on the bottom (trundle) can be used as extra bed or storage. \$300 BO 925-837-0863

Mahogany Dining Room Set & Hutch \$2,000;Portable SPA with Cover excellent condition \$2,000; Amoire/Entertainment Center \$100 925-449-2008

Bedroom furniture set - dresser \$95, desk \$125, and nightstand \$50, like new, light maple laminate finish, photos, \$225 takes all. 925-837-7463

Escalon: 6 piece BR set Dark Wood, Calif King Headboard, \$400 , Green Plaid Down Couch \$50. After 5pm. 209-838-3195

Mower 2003 Craftsman 6.3 with bagger \$140.00 (new \$250.00) call and leave a message. 925-449-1823

MISCELLANEOUS

Encyclopedia Set Plus 12 Year Books from 1983 to 1994 and 5 Chidcraft Books 1982 to 1986. \$100 OBO. 925-625-9215

4 Oakland A Tickets. vs Yankees. Sat. 8/2/03. 1:05pm start. Field level

seats.\$35 each. \$125 for all. 209-956-4686

Tickets,Bruce Springsteen at Pac-Bell Park, Sat Aug 16th 730pm.Viewing level,section cr321 row 12 seats 4 thru 8. \$138.00 ea. 925-783-5607

Baby Swing- 6 speed w/music and toy tray. Great condition \$40.00 925-371-5576

DeVilbiss 30 gal. air compressor. 6.9 CFM @90psi. Like new. \$180 209-858-4664

RASCAL 200 electric power mobility scooter. 2003, red with gray leather seat, rotating seat. Only used 3 times. \$1,500.00 510-489-9586

Planer, Rockwell RC-13 13-inch industrial, 2 HP, with HTC roller stand xLnt cond. \$750. 925-455-5655

Motor, Leeson 1/2 HP, 1725 RPM, 120/240V, 56 frame, 5/8 shaft. \$30. 925-455-5655

Books - Dudley Pope Lord Ramage Series, Bernard Cornwell Richard Sharpe Series. Paperback, complete series. \$7 each. 925-447-0596

Owl Collectible plates w/frames 209-529-9137

Metalica concert tickets - six available w/Limp Biscuit & Lincoln Park. August 10 @ Candlestick Park. \$75 General Admission 925-443-4004

Bedroom set - Dark Pine---Head-board; dresser w/mirror,hutch; night-stand great for summer/guest home. BO 925-837-0863

Matt Galvin Memorial Ranch Day, Saturday, Aug.2, Team Penning, Gymkhana, Raffle, BBQ & Dancing. Call for tickets and info. 925-787-0358

Weber Barbeque, Kettle Style. Black. Good Condition. \$75.00 925-426-1438

ZAPPY Electric Scooter with charger. RED, used only a couple of months. Excl. cond. 12-15 mph \$80.00 925-447-0589

MOTORCYCLES

2001 - BMW 650GSA ABS, New clutch, 3 cases, heated hand grips, tall windsheild, \$6,000 or BO 925-855-0607

2001 - Harley Davidson 1200cc Custom Sportster.Yellow/Black with lots of chrome. Extended warranty. Low miles. Excellent condition. \$9,000 209-833-9715

1987 - Kawasaki Ninja 750R, 11k mi,stored 6 yr,new tires,chain,sprockets (U-install). Clean, needs carbs cleaned, DMV thru 5-04, \$1000,pls call before 9 PM 925-449-7009

1987 - Husqvarna WR430 Enduro. 1982 Yamaha IT465 w/front disk graft. Both strong runners w/excellent mechanicals, nu rear tires, etc. \$900 each obo/trade. 209-467-4418

PETS & SUPPLIES

Free to good home - 1 year old female labrador/boxer. She is great with kids. She likes biking, camping, hiking and swimming. 925-454-0744

Free to good home Akita 3yrs old 209-858-5597

For Sale, Hand fed baby African Grey parrot available in late August/early September. Very sweet, Great family pet. 925-371-8283

CCCHA Playday, Come join the fun! Horse & People events, Raffle, Fun for everyone! 925-381-2359

RECREATION EQUIPMENT

7x7 hot tub/spa with 12 jets and a therapy seat. Cover included. \$1900 obo. 209-832-9534

Health Rider, dusty, but works great. 40.00 or BO 209-832-8944

Golf Clubs.Mens Complete Set. Rawl-

ings Irons 2-9, wedge, putter. Accu-tech Woods 1,3,5, bag, cart, balls, \$125. 925-443-3213

PITCHING MACHINE. Louisville Slugger Hand Operated throws baseballs or softballs up to 60 mph. weight 16 lbs. Used for 3 months only. \$60.00 925-447-0589

Easy Rider \$50 or best offer. 925-449-2008

RIDESHARING

Express your commute, call 2-RIDE for more information or visit <http://www-r.llnl.gov/tsmp>.

Berkeley/Oakland - Need 1-2 others for Berkeley/Oakland carpool. Leave 8 am (arrive 8:40 am), return 6 pm. 9/80 schedule. Will adjust hours. 510-653-0400, ext. 2-4022

Patterson - Vanpool has seats available for 7:30-4 p.m. shift. Take advantage of Pre-tax Transportation & Guaranteed Ride Home programs. Call for more details. 209-892-2118, ext. 2-9502

San Leandro - Looking to join a carpool or vanpool. 7a.m. -3:30 pm. 510-357-2306, ext. 3-3672

Pleasant Hill/Walnut Creek - Seats available on luxury van from Pleasant Hill, Walnut Creek. \$90/month. 7:30-4:30. 925-947-6969, ext. 2-4206

Modesto - Ride Share - Scenic and Oakdale Road. Hours: 8 - 5 p.m. can be in earlier and stay a little later, if necessary/flexible. 209-579-7673, ext. 2-8645

MANTECA - Rider/Driver Work hours are 7:30 a.m. to 4 p.m. Flexible drive schedule. 209-823-5593, ext. 3-8539

SHARED HOUSING

Tracy (across from ACE) - Roommate to share house - 1 bedroom, bonus room, private bath, kitch, laundry, spa, Internet, cable. \$500, + utilities. Must love cats. 209-839-2266

Livermore- Room w/shared bath. \$500.00 mo.+ deposit.(\$50.00 mo. utilities, cable/internet) No pets. 10 min to LLNL. 925-456-7528

Livermore 1 mile to LLNL, Share 3 bd/2 bath home - Bedroom, private bath, own living area, wash/dry, no pets/smoking. \$775 month and 1/2 util Deposit 925-373-1166

Livermore - Room for Rent, Share 3bd/1.5 bath home - no smoking/pets, \$500/ month includes utilities, no deposit. 925-245-1361

Livermore - Mature family man hoping to cut commute. Desires: quiet bedroom; daysleeper; SAT-TUE; no amenities. 916-624-4395

Livermore - -female roommate needed to rent a room in my 3bd/2ba home across from LLNL. \$600.00 + utilities N/S/ or N/P full privileges. 925-443-2288

SERVICES

WELDING Services-Steel Only. Need something designed/built, repaired/changed? i.e. Trailers, Towing Hitches, odds/ends. 925-200-3188 or 925-829-5126

Child Care Available: Newborns and older OK. Located right next to LLNL! Licensed: 013416736. First come/first served. 925-245-9521

Wedding Photography: 23 yrs exp. Medium format cameras used. You keep the negatives 925-829-1474

Frozen beverage machine rentals for all occasions. 2 bowl machines, no ice required, with/without alcohol. (925) 337-0802 or 925-240-0794

House/Pet Sitter available in the Tracy/Livermore area. Very responsible, references available from past clients upon request. 209-629-4953

TRUCKS & TRAILERS

1999 Wilderness Trailer 25ft. Walk-around Queen Bed.Fully self-contained.Very Clean. \$12,000 925-462-4927

Motorhome- 21 ft. American Clipper, New tires and radiator. Rebuilt transmission. Self contained, sleeps 5. 925-371-5576

2001 - Ford Ranger, 39K Miles, \$8K obo. Alarm, Billet Grill, New Tires. Many more options, too many to list. 925-606-1419

2003 - NEW!! 16 inch Alloy Wheels, 6 Lug, from a Chevy/Silverado. \$100 for ALL four, call: 209-824-2618

1970 - Chevy Pick-Up, Tilt Steering Wheel, Two Wheel Drive, 307 CID, CAM/Lift, New Tires and Wheels, Flowmasters \$8,000 OBO 209-824-2618

1999 - F250, Ext. Cab, 4X4 V-10, LWB, XLT, Tan; Rebuilt transmission, rear end, a/c, and clutch. New tires, plugs, belt; \$15,500 925-371-5576

1995 - GMC Yukon, 4 Wheel Drive, 4 Door, Silver with Black Trim, Strong Engine & Trans, Tow Package, 153K mostly freeway miles, needs minor work, \$7,500 OBO 925-785-2371

2000 - Toyota Tundra SR5, 27,000 miles, excellent condition, V8,Air, CD, Alarm, Remote Entry, Hitch, Bed Liner, Alloy Wheels, SnugTop Shell, \$20,400 925-829-3226

Ford factory bed liner. Fits 99-03 Super Duty 8 ft bed. New, never used. \$75.00 925-960-1788

VACATION RENTALS

Maui, HI - Kahana Reef oceanfront 1BR/1BA condominium. Beautiful two-island view, oceanside pool, and BBQs. Low LLNL rates for year-round reservations. 925-449-0761

Sooo cute beach cottage in Santa Cruz. 4 blks from ocean, 2bedr. 2 bath. Sleeps 7-8. Spa & fully equipped kitchen. 925-245-1114

Very nice modern mountain house near Arnold. 4 bedr.,2bath. Sleeps 10. TV,VCR,DVD, nice deck, fully equipped kitchen, wood burning stove. 925-245-1114

Solana Beach/Del Mar - Oceanfront condo, Deluxe 2br. 2 1/2 ba., tennis, pool, jacuzzi, fully equiped, gated and indoor parking, near San Diego attractions 925-443-2271

SOUTH LAKE TAHOE - 3 Bedroom 2 bath Chalet, nicely furnished, All amenities, Park w/ Lake, tennis etc. Great for family vacation! RESERVE NOW FOR SUMMER OPENINGS! 209-599-4644

South Lake Tahoe - Great family home for rent. Four bedrooms plus kids loft. All amenities, no smoking, no pets, mid week rates. 925-484-3162

WANTED

1967 - Wanted straight 1967-68 MUSTANG FRAME or complete vehicle. Will pay reasonable price. After 4 p.m. 209-835-3352

Boxes for moving. 925-606-1216

A small boat trailer. 925-455-4392

Wanted someone to RE-ASPHALT my driveway in Tracy. Please call after 4 p.m. 209-835-3352

Services and merchandise listed in *Newsline* are not guaranteed. It is up to the buyer to scrutinize services purchased.





JACQUELINE MCBRIDE/NEWSLINE

Craig Wuest explains the inner workings of the National Ignition Facility's target chamber Thursday for community members during a tour of the giant laser building.

## COMMUNITY DAY

*Continued from page 1*

"We're an integral part of the community and the community keeps getting closer and closer," he said. "We want to be a good neighbor and hope the community will continue to support the laboratory."

From the Laboratory's 50th Anniversary celebration last September to the Lab's role in the nation's newly created Homeland Security Department, Anastasio highlighted in colloquial terms how LLNL reaches out to the community.

Last December, the Lab opened its Homeland Security Organization to help federal, state and local officials fight terrorism.

"We've spent a lot of energy over the year to help the country combat the threats of terrorism," Anastasio said. "We are using our science and technology to understand the threats, to detect and prevent things before they happen, and to respond and recover in case they do. This institution can play a central role in supporting the Department of Homeland Security."

During his one-hour talk, Anastasio reviewed recent programmatic successes for NIF and in Stockpile Stewardship. He also provided clarification on some of the lab's challenges this past year — including the UC Contract, the wall-to-wall inventory and business operations issues as well as security, and the pending closure of East Avenue. He also introduced institutional facility manager Denise Robinson, who unveiled the strategic site plan for the laboratory.

Camille Yuan-Soo-Hoo, the National Nuclear Security Administration site manager, discussed the role of NNSA at the Lab, "We're here to be a part of the community," she said. "We want to hear what you have to say about it."

After the morning addresses, guests — which included neighbors, city council members, school board members, police and fire officials — boarded chartered buses for the tours.

"It was a great opportunity to see what happens here at the Lab to see some of the science that's going on," said Steve Brozosky, a Pleasanton City Council member. "This lab has some of

the best science in the world. It's a great experience to see it all and to see what we are doing for homeland security."

For Livermore Planning Manager Eric Brown, community day took some of the mystery out of what goes on at the Lab.

"I thought the lab tour was really great because it gives the laymen an appreciation of all the really unique science experiments and programs that are being done here," he said. "It gave me some real insight to what goes on at the Lab."

During the NIF tour, guests were treated to a 30-minute walk through of the building that is two-thirds complete. Workers at the 192-beam facility have already achieved their Department of Energy milestones ahead of schedule and have commissioned the first four beam lines.

"It's very interesting to see what's happening at the cutting edge of the nation's science," said Robert Sakai of the Economic Development Alliance for Business. "This is a premiere facility."

For Sharon Burnham of the Tri-

Valley Conservancy the tour was an enlightening experience.

"I knew nothing really about the Lawrence Livermore Lab," she said. "This is fascinating to me. I discovered a whole new world here at Livermore Lab. I'm glad they are in our area and know what they are doing."

Janice Cerruti of the Valley Study Group said she didn't know what to expect when she arrived but "learned things we didn't know anything about. It was very much worth our time."

At the DWTF tour, community members learned what waste products are produced at the Lab and how it is handled and treated safely without harming neighbors outside the Laboratory fence.

"What struck me is the care that everyone goes to make sure that it's a safe environment particularly with the residential area nearby," said Kevin Campbell of Goal Line Productions. "I came away with the feeling that this is a well-run facility and safe and it seemed very exciting."



JACQUELINE MCBRIDE/NEWSLINE

John Bowers of the Lab's Environmental Protection Department describes the Decontamination Waste Treatment Facility to community guests during the Laboratory's Special Community Leader Day Thursday.

## GENOME

*Continued from page 1*

which consolidated the sequencing work of Lawrence Livermore, Lawrence Berkeley, and Los Alamos national labs — DOE suggested that JGI and Celera exchange information on the three human chromosomes that were being sequenced by the JGI.

"We saw opportunities" in Celera's claim that it would finish the human sequence before the public effort, Patrinos said. The challenge "was one of the best things that happened to the project; otherwise we might still be sequencing today."

But both the National Human Genome Research Institute (NHGRI) in the United States and the Wellcome Trust in England — the other major participants in the international project — strongly objected to the collaboration, partly on the grounds that it would give Celera scientists an advance look at sequence data generated by the government before it was made publicly available to other researchers.

Patrinos, however, said a major factor in the "scorn and derision" that greeted the DOE proposal was the fact that NHGRI and the Wellcome Trust "saw Celera as too much of a threat," and feared that a JGI-Celera collaboration would embarrass DOE's partners in the public project.

Patrinos said the dispute, which he characterized as "one of the most awkward and difficult moments" in the Human Genome Project, also reflected continuing suspicions about DOE's "real intentions" as a par-

ticipant in the project. (The drive to sequence the human genome began with DOE's research into the health effects of radiation in the mid-1980s; NHGRI became the dominant funding agency when the Human Genome Project was formally launched in 1990, and Patrinos said its constantly growing budgets were a source of resentment among the DOE participants.)

"But all's well that ends well," Patrinos said. "We shelved the (collaboration), but continued to negotiate on finding a solution to the mud-wrestling match between Celera and the public project."

And while he didn't take credit for it in his talk, it was Patrinos himself who finally succeeded in brokering the agreement that resulted in the joint public-private announcement at the White House of the completion of a working draft of the human genome sequence in June 2000.

"It ended in a tie," Patrinos said, "and we found the energy to build a camaraderie that persists today."

Patrinos touched on several other issues that made headlines during the decade-long project, which ended in April of this year with the announcement that the finished human genome sequence is now publicly available. Among them:

- The "major debacle" over the decision by the journal *Science* to publish Celera's draft sequence in February 2001, even though Celera did not adhere to international agreements calling for all sequence data to be released into public databases within 24 hours. Acrimony over *Science*'s decision led the public con-

sortium to simultaneously publish its draft sequence in the British journal *Nature*.

- The still-simmering debate over whether Celera used more public data to complete its draft sequence than it has acknowledged, an argument that could help determine which researchers ultimately receive a Nobel Prize for the human genome breakthrough.

Patrinos, whose Ph.D. is in mechanical and electrical engineering, tweaked DOE and its labs — including Livermore — for focusing significantly more attention and resources on the physical sciences than on the life sciences. "DOE keeps its eye fixed on physics while peeking into (life sciences)," he said. "We haven't made the commitment to get into it wholeheartedly — especially in a lab like yours, so dominated by physics."

Patrinos closed his talk with praise for Venter and Francis Collins, the NHGRI director, along with Sen. Pete Domenici of New Mexico; his behind-the-scenes DOE colleague, Marvin Frazier; Branscomb's successor at the JGI, Trevor Hawkins; and his "personal favorite," Branscomb himself, for their dedication to the successful completion of the Human Genome Project.

Asked what the future holds, he said: "This was the end of the beginning. The hard part starts now. The road ahead will have many surprises and wonderful achievements."

The talk will be rebroadcast on Lab TV Channel 2 on Thursday at 10 a.m., noon, 2, 4, and 8 p.m., and Friday, Aug. 8 at 4 a.m.



EAST AVE.

Continued from page 1

essential facilities and infrastructure, control personnel access, and eliminate routine truck traffic along East Avenue from Vasco Road to Greenville Road, Smith said. “This project is about enhancing safety and security for our employees and our visitors as well as our community,” she said.

Alameda County Supervisor Scott Hagerty, who was instrumental in the county’s returning control of the street to the DOE, said: “I am pleased that the project is finally completed and that the closest neighbors will still have access to their homes. This new security measure should make it safer for the laboratories and the community and I’m glad the county could help make this happen.”

Features at the new East Avenue corridor include staffed security kiosks at both ends of the street 24 hours a day, seven days a week, and a larger “super kiosk” on the west end that will be used to assist unannounced visitors. Embedded pop-up barriers will stop vehicles that attempt to unlawfully advance through the checkpoint area.

Though both labs anticipate a learning curve for employees and others expected to be impacted by the changes, Smith and Leary said East Avenue security personnel would remain flexible, courteous and accommodating. They said procedures could be adjusted or more resources requested if necessary.



JACQUELINE MCBRIDE/NEWSLINE

LLNL’s David Leary, left, Sandia’s Patricia Smith and NNSA/DOE’s Camille Yuan-Soo-Hoo speak to reporters Thursday during a press conference at the new East Avenue “super kiosk.”

For information about badging visitors for non-work related activities at LLNL, such as LLESA events and classes, call the Lab’s East Avenue Badging Desk at 2-7455. Procedures for all work-related visits remain the same and must be made through the Westgate Badge Office, 2-0717.

Controlled access to the East Avenue corridor will also bring about changes to public bus service to the laboratories. Public buses will drop passengers at the turn-around area at the southeast corner of Vasco Road and East Avenue, where they will transfer to lab shuttle buses. As with any vehicle, passengers will be checked for valid badge or access permit at the kiosk. During morning and afternoon commuter hours, a shuttle bus will serve points along East Avenue, a service provided for both laboratories.

On-call taxi service is available to LLNL employees from 7:30 a.m. to 5:30 p.m. Monday through Fri-

East Ave. shuttle schedule

6:40 a.m.	A stop at Vasco Road and East Ave. and LLNL southgate entrance will be incorporated into the ACE Train shuttle, supported by LLNL.
7:50 a.m.	A stop at Vasco Road and East Ave. and LLNL southgate entrance will be incorporated into the ACE Train shuttle, supported by LLNL.
7– 8 a.m.	A continuous shuttle will run between Vasco Road and East Ave. and LLNL site, supported by LLNL.
7 – 8:30 a.m.	A continuous shuttle will run between Vasco Road and East Ave. and the Sandia/LLNL southgate entrances, supported by Sandia.
3:30 – 4:30 p.m.	A continuous shuttle will run between Vasco Road and East Ave. and the Sandia/LLNL southgate entrances, supported by Sandia.
5:10 p.m.	A stop at Vasco Road and East Ave. and LLNL southgate entrance will be incorporated into the ACE Train shuttle, supported by LLNL.

day by calling 2-TAXI. See the accompanying shuttle schedule below for times and routes.

An interim truck inspection station serving both laboratories is also in place at the east end of East Avenue near Greenville Road. Delivery truck traffic may enter the labs only from this area. A permanent truck inspection facility is under construction and is expected to become operational in October.

LLNL Protective Force officers are operating the truck inspection station and Sandia security officers are staffing the control point kiosks at each end of the East Avenue corridor.

For more information or answers to frequently asked questions, check the Web at [http://www-r.llnl.gov/securityprogram/east\\_ave\\_faq.html](http://www-r.llnl.gov/securityprogram/east_ave_faq.html)

RESEARCH

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doses of neutrons than previously estimated.

“Data from Hiroshima and Nagasaki serve as the world’s primary basis for estimating radiation-induced cancer risk in humans,” said Tore Straume, the study’s lead author. “But there were discrepancies between estimates and measurements of neutrons, which called into question the credibility of the entire dosimetry system.”

The newest findings, published this week in the journal *Nature*, are based on research by a team from LLNL, the University of Utah, and two facilities in Germany: the Technical University in Garching, and the Ludwig Maximilians University in Munich.

In the weeks after the bombs were dropped on Hiroshima and Nagasaki in August 1945, Japanese scientists were able to measure certain types of radiation near ground zero.

Those early gamma ray estimates have been validated. But detectors in those days were not capable of detecting neutron doses at a distance greater than about 700 meters, about the same altitude as the bomb when it detonated. Since most survivors were farther away from the center of the blast, direct measurements were not possible.

“It became clear that we should really be measuring fast neutrons since they contributed essentially all of the neutron dose,” said Straume, who spent 18 years at LLNL before moving to the University of Utah in 1997. “Unfortunately, a method that could detect fast neutrons more than half a century after the bombing was not available and would have to be developed.”

The first task in the project was to identify a nuclear reaction resulting in a signal of the high energy (fast) neutrons that could still be detected — and quantified — more than 50 years later.

This task was undertaken by Alfredo Marchetti, a postdoc in LLNL’s Biology and Biotechnology Research Program at the time, and presently a researcher in the Energy and Environment Direc-

torate.

Marchetti made an exhaustive search of known neutron-induced reactions, looking at expected signals and the decay of those signals since 1945. Marchetti’s computer-based search was made possible by his access to the LLNL nuclear data libraries. Of the hundreds of reactions he examined, less than 10 would show any signal, and of these, one reaction stood out as the best choice.

According to Marchetti: “In many respects, the reaction of neutrons on copper to produce Nickel-63 is the perfect detector for this work. Nickel-63 has a 100-year half-life, so most of the signal would still be there; purified copper, in the form of electrical conductors, is very common in an urban setting; and the nickel produced would remain trapped in the copper.”

But there were some daunting technical challenges in the measurements. For copper samples exposed at Hiroshima, the Nickel-63 signal is less than one million atoms per gram of copper. The radioactivity of Nickel-63, a low-energy beta emitter, is also quite weak, so the measurements can only be made by counting the individual atoms with a mass spectrometer.

“Over a three-year period, Marchetti and Jeff McAninch, a physicist in the Lab’s PAT Directorate, developed chemical extraction methods that can isolate Nickel-63 from copper materials exposed to atomic bomb neutrons, and mass spectrometric measurements using the Lab’s Center for Accelerator Mass Spectrometry Van de Graaff accelerator to quantify the Nickel-63.

The researchers made the first measurements of Hiroshima samples (lightning rods from a Hiroshima bridge at the hypocenter, and the roof of a nearby building) in May 1998.

The results reported in *Nature* cover samples collected in Hiroshima, including lightning rods, rain gutters and copper roofing materials located as far as 5,000 meters from the epicenter of the blast.

The measurements are consistent with recent calculations of the Nickel-63 activation. For the

most part the newer calculations agree with the earlier findings from DS86, except at the closest distances. The study suggests that “these results may be consistent with a slightly underestimated height-of-burst for the Hiroshima bomb.”

“With our study, we can finally say that a large discrepancy in neutron dose to Hiroshima survivors does not exist,” Straume said.

The study was funded by the U.S. Department of Energy, U.S. National Academy of Sciences, the European Commission, the German Federal Ministry of Environment and Nature Conservation and Nuclear Safety.



Newsline  
UC-LLNL  
PO Box 808, L-797  
Livermore, CA 94551-0808